

Christian Schäller

List of Publications by Year in descending order

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57

papers

3,636

citations

186265

28

h-index

254184

43

g-index

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all docs

57

docs citations

57

times ranked

4985

citing authors

#	ARTICLE		IF	CITATIONS
1	Interlayer exciton valley polarization dynamics in large magnetic fields. <i>Physical Review B</i> , 2022, 105, .	3.2	11	
2	Moiré phonons in twisted MoSe ₂ -WSe ₂ heterobilayers and their correlation with interlayer excitons. <i>2D Materials</i> , 2021, 8, 035030.	4.4	29	
3	Large-scale Mapping of Moiré Superlattices by Hyperspectral Raman Imaging. <i>Advanced Materials</i> , 2021, 33, e2008333.	21.0	41	
4	Large-scale Mapping of Moiré Superlattices by Hyperspectral Raman Imaging (Adv. Mater. 34/2021). <i>Advanced Materials</i> , 2021, 33, 2170267.	21.0	0	
5	Ultrafast Charge-Transfer Dynamics in Twisted MoS ₂ -WSe ₂ Heterostructures. <i>ACS Nano</i> , 2021, 15, 14725-14731.	14.6	32	
6	Intersubband excitations in ultrathin core-shell nanowires in the one-dimensional quantum limit probed by resonant inelastic light scattering. <i>Physical Review B</i> , 2021, 104, .	3.2	3	
7	Low-frequency Raman scattering in WSe ₂ -MoSe ₂ heterobilayers: Evidence for atomic reconstruction. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	30	
8	Interlayer Excitons in Transition-Metal Dichalcogenide Heterobilayers. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1900308.	1.5	15	
9	Tuning Spontaneous Emission through Waveguide Cavity Effects in Semiconductor Nanowires. <i>Nano Letters</i> , 2019, 19, 7287-7292.	9.1	3	
10	Absence of a giant spin Hall effect in plasma-hydrogenated graphene. <i>Physical Review B</i> , 2019, 99, .	3.2	27	
11	Ultralong spin lifetimes in one-dimensional semiconductor nanowires. <i>Applied Physics Letters</i> , 2019, 114, 202101.	3.3	10	
12	Ultrafast Transition from Intra- to Interlayer Exciton Phases in a Van Der Waals Heterostructure., , 2019, , .		0	
13	Dielectric Engineering of Electronic Correlations in a van der Waals Heterostructure. <i>Nano Letters</i> , 2018, 18, 1402-1409.	9.1	39	
14	Momentum-space indirect interlayer excitons in transition-metal dichalcogenide van der Waals heterostructures. <i>Nature Physics</i> , 2018, 14, 801-805.	16.7	229	
15	Exciton Diffusion and Halo Effects in Monolayer Semiconductors. <i>Physical Review Letters</i> , 2018, 120, 207401.	7.8	193	
16	Zeeman Splitting and Inverted Polarization of Biexciton Emission in Monolayer WS_{2} . <i>Physical Review Letters</i> , 2018, 121, 057402.	7.8	70	
17	Towards Room-Temperature Single-Photon LEDs by FRET from Metal Nanoparticles to Exfoliated 2D Crystal Overlays., , 2018, , .		0	
18	Optical spectroscopy of interlayer excitons in TMDC heterostructures: exciton dynamics, interactions, and giant valley-selective magnetic splitting., , 2018, , .		0	

#	ARTICLE	IF	CITATIONS
19	Magneto-Raman spectroscopy of spin-density excitations in (001)-grown GaAs-AlGaAs quantum wells in the regime of the persistent spin helix. , 2018, , .	0	
20	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. Proceedings of SPIE, 2017, , .	0.8	0
21	Direct Observation of Ultrafast Exciton Formation in a Monolayer of WSe ₂ . Nano Letters, 2017, 17, 1455-1460.	9.1	171
22	Spectral focusing of broadband silver electroluminescence in nanoscopic FRET-LEDs. Nature Nanotechnology, 2017, 12, 637-641.	31.5	18
23	Interlayer exciton dynamics in a dichalcogenide monolayer heterostructure. 2D Materials, 2017, 4, 025112.	4.4	146
24	Coulomb engineering of the bandgap and excitons in two-dimensional materials. Nature Communications, 2017, 8, 15251.	12.8	526
25	Valley dynamics of excitons in monolayer dichalcogenides. Physica Status Solidi - Rapid Research Letters, 2017, 11, 1700131.	2.4	19
26	Characterization of highly crystalline lead iodide nanosheets prepared by room-temperature solution processing. Nanotechnology, 2017, 28, 455703.	2.6	45
27	Highly Localized Strain in a MoS ₂ /Au Heterostructure Revealed by Tip-Enhanced Raman Spectroscopy. Nano Letters, 2017, 17, 6027-6033.	9.1	91
28	Direct Observation of the Band Gap Transition in Atomically Thin ReS ₂ . Nano Letters, 2017, 17, 5187-5192.	9.1	65
29	Giant magnetic splitting inducing near-unity valley polarization in van der Waals heterostructures. Nature Communications, 2017, 8, 1551.	12.8	105
30	Polarized surface-enhanced Raman spectroscopy of suspended carbon nanotubes by Pt-Re nanoantennas. Physical Review B, 2017, 96, .	3.2	4
31	Neutral and charged inter-valley biexcitons in monolayer MoSe ₂ . Nature Communications, 2017, 8, 15552.	12.8	159
32	Rotation of polarized light emission from monolayer WS ₂ induced by high magnetic fields. , 2017, , .	0	
33	Trion valley coherence in monolayer semiconductors. 2D Materials, 2017, 4, 025105.	4.4	34
34	Trion Valley Coherence in Transition Metal Dichalcogenides. , 2017, , .	0	
35	Observation of anisotropic interlayer Raman modes in few-layer ReS ₂ . Physica Status Solidi - Rapid Research Letters, 2016, 10, 185-189.	2.4	48
36	Magnetic-Field-Induced Rotation of Polarized Light Emission from Monolayer WS_2 . Physical Review Letters, 2016, 117, 077402.	7.8	76

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37	Excitonic Valley Effects in Monolayer WS ₂ under High Magnetic Fields. <i>Nano Letters</i> , 2016, 16, 7899-7904.	9.1	114
38	Coherent and Incoherent Coupling Dynamics between Neutral and Charged Excitons in Monolayer MoSe ₂ . <i>Nano Letters</i> , 2016, 16, 5109-5113.	9.1	78
39	Trion fine structure and coupled spin-valley dynamics in monolayer tungsten disulfide. <i>Nature Communications</i> , 2016, 7, 12715.	12.8	239
40	Excitonic linewidth and coherence lifetime in monolayer transition metal dichalcogenides. <i>Nature Communications</i> , 2016, 7, 13279.	12.8	360
41	Enhanced spin-orbit coupling in core/shell nanowires. <i>Nature Communications</i> , 2016, 7, 12413.	12.8	34
42	Identification of excitons, trions and biexcitons in single-layer WS ₂ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2015, 9, 457-461.	2.4	282
43	Tailored nanoantennas for directional Raman studies of individual carbon nanotubes. <i>Physical Review B</i> , 2015, 91, .	3.2	6
44	Control of biaxial strain in single-layer molybdenite using local thermal expansion of the substrate. <i>2D Materials</i> , 2015, 2, 015006.	4.4	149
45	Time-resolved spectroscopy of coupled spin-valley-dynamics in monolayer transition metal dichalcogenides at low temperatures. , 2015, , .		0
46	Long exciton lifetimes in stacking-fault-free wurtzite GaAs nanowires. <i>Applied Physics Letters</i> , 2014, 105, 222109.	3.3	24
47	Weak localization and Raman study of anisotropically etched graphene antidots. <i>Applied Physics Letters</i> , 2013, 103, 143111.	3.3	29
48	Frequency Shift in Graphene-Enhanced Raman Signal of Molecules. <i>ChemPhysChem</i> , 2012, 13, 4271-4275.	2.1	11
49	Anisotropic spin dephasing in a (110)-grown high-mobility GaAs/AlGaAs quantum well measured by resonant spin amplification technique. , 2011, , .		1
50	Inelastic light scattering of hole spin excitations in p-modulation-doped GaAs-AlGaAs single quantum wells. , 2011, , .		0
51	Scanning Raman spectroscopy of nanostructured graphene: doping due to presence of edges. <i>Proceedings of SPIE</i> , 2011, , .	0.8	0
52	Spin Dynamics in High-Mobility Two-Dimensional Electron Systems. <i>Advances in Solid State Physics</i> , 2009, , 143-155.	0.8	11
53	High spin polarization of optically-oriented trions in p-doped GaAs-AlGaAs quantum wells. <i>AIP Conference Proceedings</i> , 2007, , .	0.4	0
54	Confinement Effects on Optical Phonons in Polar Tetrapod Nanocrystals Detected by Resonant Inelastic Light Scattering. <i>Nano Letters</i> , 2006, 6, 478-482.	9.1	35

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55	Single-particle-like states in few-electron quantum dots. Physical Review B, 2000, 61, 15600-15602.	3.2	18
56	Raman spectroscopy of quantum wires and dots: magnetoplasmons and edge-spin-density modes. Physica E: Low-Dimensional Systems and Nanostructures, 1998, 3, 121-128.	2.7	6
57	Quantum Wires: Interacting Quantum Liquids. , 0, , 121-143.	0	0